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BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER
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MOE, AUNG SOE

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 08/26/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

2

**Office Action Summary**

Application No.

09/325,431

Applicant(s)

MASAAKI ET AL.

Examiner

Aung S. Moe

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 2,4,16,17 and 19-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1,3,5-15,18 and 23-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Election/Restrictions***

1. Applicant's election of Species I (Figs. 1-3) and claims 1, 3, 5-15, 18 and 23-29 as set forth in Paper No. 9 (i.e., received on 6/23/03) is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

***Specification***

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and **legal phraseology often used in patent claims, such as "means"** and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because the abstract contains legal phraseology often used in patent claims, such as "means" (i.e., see line 10 of the Abstract).

Correction is required. See MPEP § 608.01(b).

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1, 3, 6, 9, 13, 15 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Suemoto et al. (U.S. 6,151,067).

Regarding claim 1, Suemoto '067 discloses an image-capturing apparatus (i.e., Fig. 1; noted the image-capturing apparatus 10/90), comprising: a first image-capturing unit having a first image-capturing optical system (i.e., noted the camera 10 of Fig. 1); and a second image-capturing unit having a second image-capturing optical system (i.e., noted the camera 90 as shown in Fig. 1), the second image-capturing unit being detachably connected to the first image-capturing unit (i.e., noted that the camera 10 and 90 may be detachably connected via the elements' 11 and 91; see col. 11, lines 25-55).

Art Unit: 2612

Regarding claim 3, Suemoto '067 discloses a connection detector for detecting the first image-capturing unit is connected to at least the second image-capturing unit (i.e., noted that the detector of the camera is capable of detecting the presence of an external video input connected to the video input terminal thereof; see the Abstract and Fig. 8);

an information transmitter for transmitting information between the first image-capturing unit and the at least the second image-capturing unit (i.e., noted that with the use of connector 11 and 91, the audio/video and other information may be transmitted between the camera 10 and other devices such as the camera 90; see col. 5, lines 50+); and

a controller for synchronizing or interlocking image-capturing operation of the first image-capturing unit and at least the second image-capturing unit (i.e., noted that when the camera 90 is connected to the camera 10, the controller devices 15/12 of the camera 10 is capable of interlocking image-capturing operation of the camera 10 and 90 by allowing the camera 10 as a video tape recorder of the camera 90 and designed to be capable of edit-searching as discussed in col. 11, lines 25+).

Regarding claim 6, Suemoto '067 discloses a power-supplying device for supplying power from a power source of the first image-capturing unit to at least the second image-capturing unit (i.e., col. 11, lines 50-55).

Regarding claim 9, Suemoto '067 discloses wherein the first image-capturing unit comprises **at least one of**: an AE device for measuring an AE value for controlling automatic exposure; an AWB device for measuring an AWB value for automatically controlling white balance (i.e., noted that the camera signal processor 20 contains an AWB circuit; thus, the an AWB value must be included in the system of Suemoto '067; see col. 6, lines 1+); and an AF

Art Unit: 2612

device for measuring an AF value for automatically controlling a focal point; wherein the first image-capturing unit automatically controls **at least one of** the exposure, the white balance and the focal point in accordance with said at least one of AE value, the AWB value and the AF value obtained by the first image-capturing unit (i.e., see col. 6, lines 1+).

Regarding claim 13, Suemoto '067 discloses an electronic camera as the first image-capturing unit (i.e., noted the camera 10 as shown in Fig. 2) and comprising: a connecting part (i.e., noted the element's 11 of the camera 10 as shown in Fig. 2; see col. 5, lines 45+) to which the second image-capturing unit (90) is connected; and an information transmission part for transmitting data between the first image-capturing unit and the second image-capturing unit connected to the first image-capturing unit through the connecting part (i.e., col. 4, lines 60-col. 5, lines 60; col. 6, lines 30+ and col. 11, lines 25+).

Regarding claim 15, Suemoto '067 discloses the image-capturing unit comprising: an imaging part including an imaging device for converting a light from a subject into an electric signal, the imaging part being constructed in the same manner as the image-capturing optical system loaded in the electronic camera (i.e., noted the camera 90 is a video camera which is similar to the camera 10 with a zooming function and outputting the video/audio signals thereof, thus, the camera 90 must includes the imaging device such as the CCD sensor as shown in Fig. 2; see col. 11, lines 25+); a joint capable of jointing with the connecting part of the electronic camera (i.e., noted from the Fig. 1 of Suemoto '067 that the multi-connector 11 of the camera 10 is function as a joint for jointing the connecting part of the camera 90 and the other connecting members); and

Art Unit: 2612

a second information transmission part connectable with the information transmission part of the electronic camera (i.e., noted that each camera 10 and 90 contain a corresponding information transmission parts, such that 11 and 91; e.g., see Fig. 14, the elements 11 & 301).

Regarding claim 18, Suemoto '067 discloses wherein each of the first and second image-capturing units comprises an imaging device for converting a light from a subject into an electric signal, and captures an image as an electronic image (i.e., noted from Figs. 1 and 2 of Suemoto '067 that the cameras 10 and 90 are a video camera having the CCD sensor).

7. Claims 1, 5, 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaneko (U.S. 4,920,371).

Regarding claim 1, Kaneko '371 discloses an image-capturing apparatus (Figs. 1, 4 and 7), comprising: a first image-capturing unit having a first image-capturing optical system (i.e., noted the camera 2); and a second image-capturing unit having a second image-capturing optical system (i.e., noted the camera 1), the second image-capturing unit being detachably connected to the first image-capturing unit (i.e., noted from Figs. 1, 4 and 7 that the cameras 2 and 1 are electrically and mechanically connected each other, thus, it is cleared that the camera 1 may be detached from the camera 2; see col. 3, lines 1+).

Regarding claim 5, Kaneko '371 discloses wherein each of the first and second image-capturing units has a power source (i.e., noted that each of the ES camera 2 and the large-size camera 1 must include a power source in order to perform the image capturing functions. Thus, the power source is considered as an inherent feature of the conventional cameras 2 and 1 as shown in Fig. 1 of Kaneko '371).

Art Unit: 2612

Regarding claim 7, Kaneko '371 discloses wherein the second image-capturing unit records an image at the same time as the first image-capturing unit does in synchronism with an image recording start signal outputted from the first image-capturing unit (i.e., noted that the image captured by the camera 1 is recorded in synchronism with the camera 2 as shown in Fig. 5).

Regarding claim 8, Kaneko '371 discloses wherein an image capture timing of the second image-capturing unit is offset from a reference image capturing timing of the first image-capturing unit by a predetermined time to thereby continuously capture images with the first and second image-capturing units (i.e., noted from Figs. 3 and 5, the timing of the camera 1 is offset from a reference image capturing timing of the camera 2 by a predetermined time, e.g., the times t1-t5, thereby continuously capture images with the first and second camera units; see col. 3, lines 20+, col. 7, lines 5+).

8. Claims 1, 9 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Masayoshi (U.S. 5,990,937).

Regarding claim 1, Masayoshi '937 discloses an image-capturing apparatus (i.e., Fig. 1), comprising: a first image-capturing unit having a first image-capturing optical system (i.e., the camcorder 10); and a second image-capturing unit having a second image-capturing optical system (i.e., the camera 20), the second image-capturing unit being detachably connected to the first image-capturing unit (i.e., noted that the camera 20 is attached to the camcorder 10, thus, it is cleared that the camera 20 may be detached from the camcorder 10; col. 3, lines 45+ and col. 4, lines 5+).



Art Unit: 2612

Regarding claim 9, Masayoshi '937 discloses wherein the first image-capturing unit comprises **at least one of**: an AE device for measuring an AE value for controlling automatic exposure (i.e., see Fig. 3; see col. 5, lines 25+); an AWB device for measuring an AWB value for automatically controlling white balance; and an AF device for measuring an AF value for automatically controlling a focal point (i.e., col. 5, lines 20+); wherein the first image-capturing unit automatically controls **at least one of** the exposure, the white balance and the focal point in accordance with said at least one of AE value, the AWB value and the AF value obtained by the first image-capturing unit (i.e., col. 5, lines 20+).

Regarding claim 10, wherein the second image-capturing unit comprises **at least one of**: an AE device for controlling automatic exposure (i.e., noted the AE circuit 39 as shown in Fig. 3; see col. 5, lines 25+); an AWB device for measuring an AWB value for automatically controlling white balance; and an AF device for measuring an AF value for automatically controlling a focal point (i.e., noted the AF device as shown in Fig. 3); wherein the first image-capturing unit and the second image-capturing unit share measuring operations and measured results (i.e., see Fig. 6; col. 6, lines 55+ and col. 11, lines 15+).

9. Claims 1 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by McClellan et al. (U.S. 5,329,325).

Regarding claim 1, McClellan '325 discloses an image-capturing apparatus (i.e., see Fig. 1), comprising: a first image-capturing unit having a first image-capturing optical system (i.e., the camera 12); and a second image-capturing unit having a second image-capturing optical system (i.e., the camera 20), the second image-capturing unit being detachably connected to the

Art Unit: 2612

first image-capturing unit (i.e., noted from Fig. 1 that the camera 12 is detachably connected to the camera 20 via the elements 28, 29 and 31).

Regarding claim 11, McClellan '325 discloses wherein: each of the first and second image-capturing optical systems comprises a zoom lens (i.e., noted the zoom lenses 13 and 32 of the first and second cameras as shown in Fig. 1); and the image-capturing apparatus further comprises a lens controller for driving the zoom lenses of the first and second image-capturing optical systems to equalized zooming magnification of the first and second image-capturing optical system (i.e., col. 2, lines 24-54).

10. Claims 1, 6, 11-12 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Vockenhuber (U.S. 5,329,325).

Regarding claim 1, Vockenhuber '325 discloses an image-capturing apparatus (i.e., see Fig. 1), comprising: a first image-capturing unit having a first image-capturing optical system (i.e., the camera 4); and a second image-capturing unit having a second image-capturing optical system (i.e., the camera 1), the second image-capturing unit being detachably connected to the first image-capturing unit (i.e., noted from Fig. 1 that the camera 4 is detachably connected to the camera 1; see col. 2, lines 50-55).

Regarding claim 6, Vockenhuber '325 discloses a power-supplying device for supplying power from a power source of the first image-capturing unit to at least the second image-capturing unit (i.e., noted from Fig. 1 that the power source 43/44 of the camera 4 is used for supplying the power to the camera 1).

Art Unit: 2612

Regarding claim 11, Vockenhuber '325 discloses wherein: each of the first and second image-capturing optical systems comprises a zoom lens (i.e., noted the zoom lenses 27/24 and 36/23 of the first and second cameras as shown in Fig. 1; col. 3, lines 3+); and the image-capturing apparatus further comprises a lens controller for driving the zoom lenses of the first and second image-capturing optical systems to equalized zooming magnification of the first and second image-capturing optical system (i.e., col. 3, lines 50-56).

Regarding claim 12, Vockenhuber '325 discloses wherein each of the first and second image-capturing optical systems comprises a non-contact communication device for transmitting information between the first image-capturing unit (4) and the second image-capturing unit (1) by using electromagnetic waves (i.e., see col. 6, lines 55+).

Regarding claim 18, Vockenhuber '072 shows the use of first and second image-capturing units comprises an imaging device (i.e., noted that the TV camera contains an imaging device which is capable of capturing the electronic image; see col. 3, lines 15+) for converting a light from a subject into an electrical signal, and captures an image as an electronic image (i.e., noted from col. 7, lines 5-10, Vockenhuber '072 discloses the use of first and second TV camera together).

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2612

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suemoto '067 in view of Fukuoka (U.S. 5,754,227).

Regarding claim 14, although Suemoto '067 shows that the external device (i.e., the devices 30, 50, 90, 92 and 300) are detachable attached to the electronic camera (10) through the information transmission part (11), Suemoto '067 does not explicitly shows that the information transmission part is capable of being used as a slot through which an external storage device is detachably attached to the electronic camera as required by the present claimed invention.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Fukuoka '227. In particular, Fukuoka '227 teaches that it is conventionally well-known to use the information transmission part of the electronic camera (Figs. 3 and 6; the elements 15-17) as being used as a slot through which an external storage device (i.e., the external memory card 16) is detachably attached to the electronic camera (30), so that it would allowed the electronic camera for efficiently communicating with various devices without

Art Unit: 2612

expensive changes to the structure of the electronic camera thereof (i.e., see col. 1, lines 45+ and col. 2, lines 15+).

Therefore, having the system of **Suemoto '067** and then given the well established teaching of Fukuoka '227, it would have obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Suemoto '067** as taught by Fukuoka '227, since Fukuoka '227 stated at col. 1, lines 45+ and col. 2, lines 15+ that such a modification would allowed the electronic camera for efficiently communicating with various devices without expensive changes to the structure of the electronic camera thereof.

13. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suemoto '067 in view of Ishikawa et al. (U.S. 6,549,650).

Regarding claim 23, it is noted that Suemoto '067 does not explicitly show the use of a gain adjuster for adjusting a gain of a video signal to equalize a video signal level of the second image-capturing unit to a video signal level of the first image-capturing unit.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Ishikawa '650. In particular, Ishikawa '650 teaches that it is conventionally well-known to use a gain adjuster for adjusting a gain of a video signal to equalize a video signal level of the second image-capturing unit to a video signal level of the first image-capturing unit (i.e., see Fig. 25; Noted the AGC circuits 1021/1201 and the TG 1025), so that the image signal levels generated by the left camera (1020) and the right camera (1200) may be synchronously adjusted to provide a good stereoscopic view (i.e., see col. 27, lines 55+ and col. 29, lines 40+).

Art Unit: 2612

Therefore, having the system of **Suemoto '067** and then given the well established teaching of Ishikawa '650, it would have obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Suemoto '067** as taught by Ishikawa '650, since Ishikawa '650 stated at col. 9, lines 45+ and col. 29, lines 40++ that such a modification would provide a good stereoscopic view by adjusting the image signal levels of the first camera (1020) and the second camera (1200).

14. Claims 24, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vockenhuber '072 in view of Ishikawa et al. (U.S. 6,549,650).

Regarding claim 24, although Vockenhuber '072 show the use of display device (Figs. 3 and 4, the element 65) for displaying the image signal captured by the first and the second camera, Vockenhuber '072 does not explicitly show an image display having a parallax barrier displaying layer on a display plane, the parallax barrier display layer displaying a parallax barrier having a pattern in which light transmissible parts and light shielding parts are arranged alternately; and a signal processor for displaying, on the image display means, one of an image pattern in which strip-shaped image fragments representing a left-eye image and a right-eye image are arranged alternately, and an image pattern in which strip-shipped image fragments representing a plurality of images are arranged in order; wherein one of an image capable of being seen three-dimensionally and an image capable of being seen differently according to viewing directions is displayed as recited in the present claimed invention.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Ishikawa '650. In particular, Ishikawa '650 teaches that it is conventionally well-

Art Unit: 2612

known to use a parallax barrier display layer on a display plane, the parallax barrier display layer displaying a parallax barrier having a pattern in which light transmissible parts and light shielding parts are arranged alternately (i.e., Fig. 10B; col. 2, lines 35+, col. 5, lines 50+, and col. 17, lines 30+); and a signal processor for displaying, on the image display means, one of an image pattern in which strip-shaped image fragments representing a left-eye image and a right-eye image are arranged alternately, and an image pattern in which strip-shipped image fragments representing a plurality of images are arranged in order; wherein one of an image capable of being seen three-dimensionally and an image capable of being seen differently according to viewing directions is displayed (i.e., Figs. 8C and 10A-10B; col. 2, lines 35+, col. 5, lines 50+, and col. 17, lines 30+) as recited in the present claimed invention.

Therefore, having the system of **Vockenhuber '072** and then given the well established teaching of Ishikawa '650, it would have obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Vockenhuber '072** as taught by Ishikawa '650, since Ishikawa '650 stated at col. 9, lines 45+ and col. 29, lines 40++ that such a modification would provide a good stereoscopic view by adjusting the parallax of the principal object in the images.

Regarding claim 25, the combination of Vockenhuber '072 and Ishikawa '650 shows wherein the first and second image-capturing units capture images at different focal positions, and focused areas in the images are combined to compose an image that is focused over the whole image (i.e. It is noted that Vockenhuber '072 shows the first and second image-capturing units at different focal positions and Ishikawa '650 teaches that the images are combined to compose an image that is focused over the whole image, thus, the claimed limitations of the

Art Unit: 2612

present claimed invention is considered obvious over the combination of Vockenhuber '072 and Ishikawa '650 for the same reasons as discussed above; see Figs. 3 and col. 5, lines 40+ of Vockenhuber '072; Figs. 21B, 50 and 51 of Vockenhuber '0720).

Regarding claim 26, it is noted that although Vockenhuber '072 does not disclose all the limitations as recited in the claim 26, such limitations are well known in the art as evidenced by Ishikawa '650. In particular, Ishikawa '650 teaches wherein depth distribution information is extracted from the images captured by the first and second image-capturing units to perform special effects (i.e., a stereophonic effect) for areas that are not at a predetermined image-capturing distance (i.e., col. 41, lines 45+, col. 42, lines 10+).

In view of the above, having the system of **Vockenhuber '072** and then given the well established teaching of Ishikawa '650, it would have obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Vockenhuber '072** as taught by Ishikawa '650, since Ishikawa '650 stated at col. 9, lines 45+ and col. 29, lines 40++ that such a modification would provide a good stereoscopic view thereof.

15. Claims 27, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suemoto '067 in view of Fellegara et al. (U.S. 6,441,854).

Regarding claim 27, although Suemoto '067 shows the use of display device (i.e., noted the OSD of the camera 10 as shown in Fig. 2) for the image-capturing unit 10 and the different external units may be connected the image-capturing unit, such as the electronic camera 10, Suemoto '067 does not explicitly show a shot number display for displaying a number of possible shots according to a number of connected image-capturing units.



Art Unit: 2612

However, it is conventionally well-known in the art to use a display for displaying the storage/memory condition, such as the number of possible shots, of the camera device as taught by Fellegara '854 (i.e., see noted the LCD 22 of the camera as shown in Fig. 3). In particular, Fellegara '854 teaches that when the camera having first and second image-capturing devices (i.e., Noted from Fig. 6 that the camera 10 comprises the first image-capturing device 70 and the second capturing device 60) and the display device 22 of the image-capturing device is capable of displaying a number of possible shots according to the first and second image-capturing units (i.e., col. 4, lines 40+ and col. 9, lines 45+).

In view of this, having the system of Suemoto '067 having a display (i.e., Fig. 2, the OSD) and wherein different number of device may be connected to the camera system and then given the well-established teaching of Fellegara '854, it would have obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Suemoto '067 by providing a display device capable of displaying the storage condition of the different image capturing devices (i.e., storage condition of the digital camera and the film camera) as taught by Fellegara '854, so that it would obviously enhance the user's convenient by allowing the user to determine the condition of the storage medium before capturing the images, thereby effective memory usage may be realized.

Regarding claim 28, Suemoto '067 does not explicitly show a file manager for recording a sequence of image data, captured by the first and second image-capturing units simultaneously or continuously, in an image file and automatically given a file name to the image file, the file name being distinguishable from a file name of an image file in which one piece of image data is recorded.

Art Unit: 2612

However, the above-mentioned claimed limitations are well known in the art as evidenced by Fellegara '854. In particular, Fellegara '854 teaches the use of a file manager for recording a sequence of image data, captured by the first and second image-capturing units simultaneously or continuously (i.e., noted the controller 120 for managing the image information captured by the digital and film camera thereof; see Fig. 6), in an image file and automatically given a file name to the image file, the file name being distinguishable from a file name of an image file in which one piece of image data is recorded (i.e., Figs. 7 & 14; col. 8, lines 50+ and col. 16, lines 15+).

In view of the above, having the system of **Suemoto '067** and then given the well established teaching of Fellegara '854, it would have obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Suemoto '067** as taught by 66, so that it would obviously provide the quick image review of the different images stored in the storage medium, since the image files are easily distinguishable from the corresponding given file name as taught by Fellegara '854.

Regarding claim 29, Suemoto '067 does not explicitly show a file manager for recording a sequence of image data, captured by the first and second image-capturing units simultaneously or continuously, in separate image files and automatically giving file names to the separate image files, the file names indicating that the separate image files are related to one another.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Fellegara '854. In particular, Fellegara '854 teaches the use of a file manager for recording a sequence of image data, captured by the first and second image-capturing units simultaneously or continuously (i.e., noted the controller 120 for managing the image

Art Unit: 2612

information captured by the digital and film camera thereof; see Fig. 6), in separate image files and automatically giving file names to the separate image files (i.e., Figs. 7 & 14; col. 8, lines 50+ and col. 16, lines 15+), the file names indicating that the separate image files are related to one another (i.e., noted that based on the ID, IIF and IDF file names are used to indicate relation of the separate image files; see col. 17, lines 1+ and col. 19, lines 5+).

In view of the above, having the system of **Suemoto '067** and then given the well established teaching of Fellegara '854, it would have obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Suemoto '067** as taught by 66, so that it would obviously provide the quick image review of the different images stored in the storage medium, since the image files are easily distinguishable from the corresponding given file name as taught by Fellegara '854.

### ***Conclusion***

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Sakamoto '660, Okauchi '360, Oie '431 and Dolgow '794 show the first and second image-capturing device coupled to each other.

Art Unit: 2612

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aung S. Moe whose telephone number is (703) 306-3021. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber, can be reach on (703) 305-4929.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231


or faxed to:

(703) 872-9314, (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the customer service number (703) 306-0377.

A. Moe

  
**AUNG S. MOE**  
**PATENT EXAMINER**

August 20, 2003